AMENDMENTS TO THE CLAIMS

Claims 1-13 (Canceled)

Claim 14 (Currently Amended): In an electronic device having a processor coupled to a computer readable memory for implementing steps, a method of calculating a transform matrix for transforming a field vector from a second field to a field vector in a first field, the method comprising the steps of:

a) receiving a reference code state chosen for the first field;

b) generating a first field vector of the reference code state;

c) iterating a linear feedback shift register (LFSR) state from the first field vector to form a new LFSR state;

d) generating a new field vector from the new LFSR state;

e) assembling the first field vector and the new field vector into a~the transform matrix, the assembling step comprising the steps of:

e1) providing the first field vector as the bottom row in the transform matrix;

e2) providing the new field vector as the next highest row in the transform matrix; and

e3) repeating providing step e2) a total of N-2 times for a total of N rows in the transform matrix, wherein N is an integer; and

f) repeating steps c) through and d) a quantity of N times, wherein N is a degree of a polynomial defining the first field and the second field.

Claims 15-33 (Canceled)

Claim 34 (Currently Amended): An electronic device for generating a mask for a linear feedback shift register (LFSR), the electronic device comprising;

a processor;

a computer readable memory unit coupled to the processor, the computer readable memory containing program instructions stored therein that, when executed via the processor, implements a method of calculating a transform matrix for transforming a field vector from a second field to a field vector in a first field, the method comprising the steps:

a) receiving a reference code state chosen for the first field;

b) generating a first field vector of the reference code state;

c) iterating an LFSR state from the first field vector;

d) generating a new field vector from the new LFSR state;

e) assembling the first field vector and the new field vector into a the transform matrix, the assembling step comprising the steps of:

e1) providing the first field vector as the lowest row in the transform matrix;

e2) providing the new field vector as the next highest row in the transform matrix; and

e3) repeating providing step e2) a total of N-2 times for a total of N rows in the transform matrix, wherein N is an integer; and

f) repeating steps c) through and d) a quantity of N times, wherein N is the a degree of the a polynomial defining the first field and the second field.

Claims 35-41 (Canceled)